

SECRET

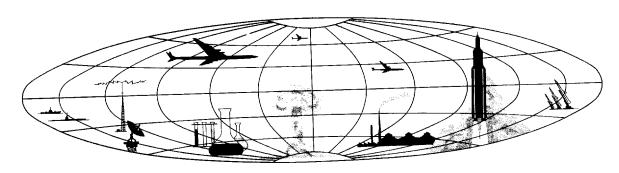
March 1965

GOA MISSILE, MOSCOW PARADE 7 NOVEMBER 1964





NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER



Approved For Release 2000/05/10 : CIA-RDSE68604560A004400010013-6

NO FOREIGN DISSEM

GROUP 1
Excluded from automatic downgroding and declassification

Approved For Release 2000/05/10: CIA-RDP78B04560A004400010013-6

WARNING

This document contains information affecting the national defense of the United States, within the meaning of Title 18, sections 793 and 794, of the U.S. Code, as amended. Its transmission or revelation of its contents to or receipt by an unauthorized person is prohibited by law.

SECRET Approved For Release 2000/05/10FOR CHANNET 010013-6

25X1C

NPIC/R-58/65

PREFACE

This report is in response to CIA requirement C-SI4-82,030 requesting mensuration and line drawings of the GOA missile and its transporter.

The mensural data contained in this report were obtained from photographic graphical solutions coupled with scaling and ratio techniques. Because of the geometrical problems involved in mensural analysis of oblique ground photography, some degree of error is inherent. The reader is cautioned that, while in many instances dimensions are carried curacy is not that reliable. The following is a general guideline in determining what degree of confidence can be placed in the data.

25X1D

25X1D

Degree of Accuracy Dimension Given

The reader is further cautioned that the graphics presented with the accompanying mensural data are not intended to be used for detailed engineering analysis.

- i -

25X1C

Approved For Release 2000/05/10 to GIA-RDR SECRET 201400040013-6

25X1C

NPIC/R-58/65

GOA MISSILE, MOSCOW PARADE 7 NOVEMBER 1964

25X1C photography of the 7 November 1964 $Moscow\ parade\ revealed\ 4\ transporters\ carrying$ 2 SA-3 GOA missiles--the first such missiles to be publicly displayed. They bore serial numbers 745203, 422556, 222050, 450007, 334005, 447752, 555700, and 557440. Photographs and detailed line drawings with complete mensural data are shown on the following pages (Figures 1-7). The SA-3 GOA is a 2-stage missile with an overall length of The first stage, or booster, is long, with the main portion of its cylinder being in diameter but the nozzle end tapered to The booster has 4 generally rectangular fins positioned on a 45degree axis to the missile centerline. Each fin measures approximately by in area. As displayed on the transporter, the longer side parallels the

25X1D

25X1D

25X1D

25X1D

25X1D

25X1D

booster body; however, the pivot union of the fin to the booster body and the design of the rear of each fin, shown clearly in Figure 7, indicate that the position of the fins changes for flight, during which the longer side is perpendicular to the body.

The second stage, consisting of sustainer 25X1D and warhead, is in length, and the 25X1D widest portion of the cylinder is diameter. The sustainer has 2 sets of 4 fins, the smaller, forward ones each with a surface area and designed to pivot on a control-fin shaft protruding from the sustainer. 25X1D The 4 rear fins on the sustainer are each 25X1D in area. An appendage on the outer edge, possibly an antenna, measures 25X1D length and in diameter. Two of the fins have aileron control surfaces, each 25X1D 25X1D

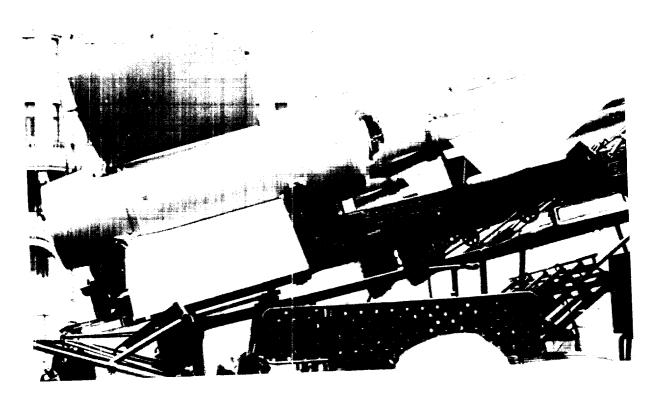


FIGURE 1. SA-3 GOA MISSILES ON PARADE.

NPIC J-8867 (3/6

Approved For Release 2000/057-60 REIN_RDP78R045602500#200010013-6

NPIC/R-58/65



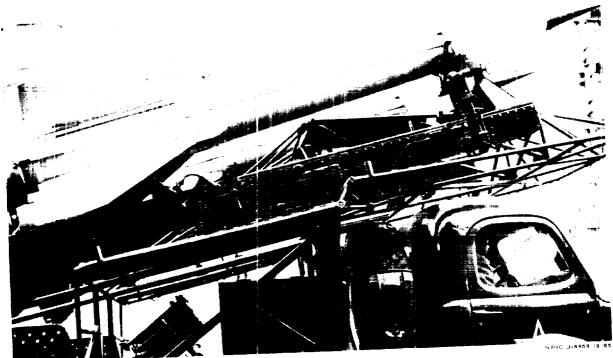


FIGURE 2. SIDE VIEWS OF BOOSTER AND SUSTAINER.

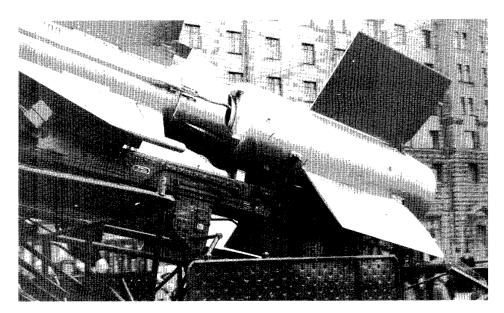
- 2 -

Approved For Release 2000/05/10 SAIA PFF78B045600 004400010013-6

NPIC/R-58/65

25X1C Approved For Release 2000/05/40 bGL 1400010013-6

NPIC/R-58/65



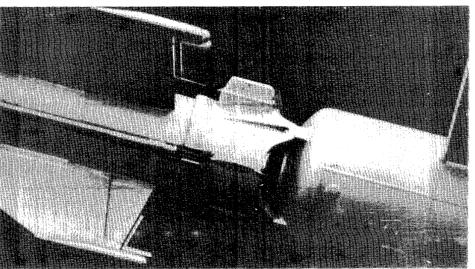
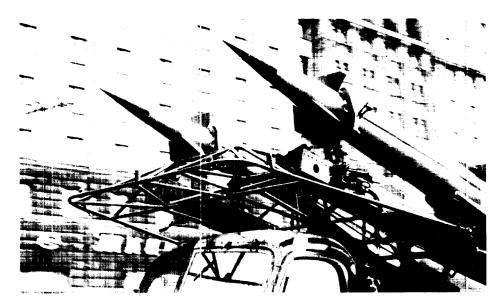


FIGURE 4. DETAILS OF THE MISSILE.

- 5 -

NPIC/R-58/65



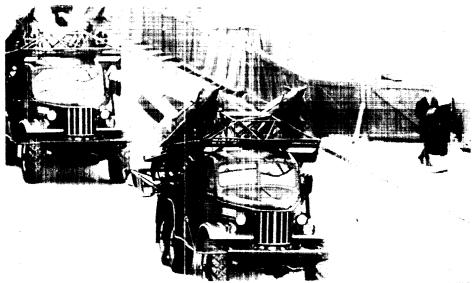


FIGURE 5. THE GOA ON TRANSPORTER

.. (1 =

Approved For Release 2000/05/10 : CIA-RĎPÝŠB04560A004400010013-6

25X1D

25X1D

25X1D

25X1D

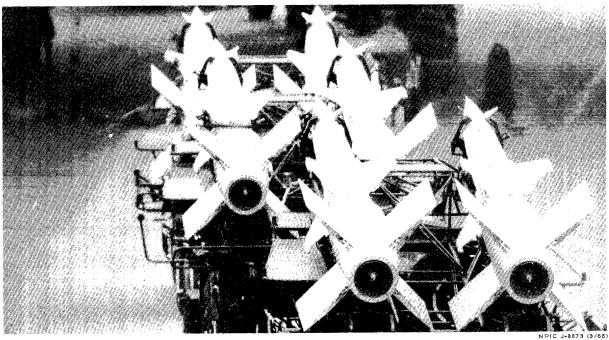
25X1D

SECRET

25X1C

SECRET Approved For Release 2000/05/10 PSI

NPIC/R-58/65



25X1D FIGURE 7. REAR VIEW OF GOA MISSILES.

25X1D

25X1D

25X1D

in area, and the alternate fins each has a in area (Figure 4). fixed tab

The transporter is a ZIL-157 truck tractor which has been modified to transport 2 GOA missiles but not to launch them. Overall length of the transporter with missiles emplaced is

maximum height is and maximum width is

The transporter has 2 rails, each one similar to the single rail on the transporter for the SA-2 GUIDELINE missile, and each rail supports

one missile. Separation of these rails to correspond to the dual rails of a GOA launcher, and layout of the inner service roads at SA-3 sites to allow turnout space near each launch position, indicate that the missiles are offloaded by backing the transporter to the front of the launcher, elevating the twin rails of the launcher to match the angle of the transporter rails, and sliding the missiles backward down the rails onto the launcher.

25X1C REFERENCES

PHOTOGRAPHY

25X1C

photography of 7 November 1964 (SECRET, Selected

REQUIREMENT

CIA. C-SI4-82,030

NPIC PROJECT

11955/64 (partial answer)